Coordination and Harmonisation of National & Thematic Initiatives to support EOSC

EOSC-Pil

101

"National Initiatives" Survey Results



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a <u>Creative Commons Attribution 4.0 International License</u>





Introduction

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.





Website www.eosc-pillar.eu Grant agreement ID 857650 EU contribution € 6.880.965

Coordinator GARR Partners

EOSC-Pillar will coordinate national Open Science efforts across Austria, Belgium, France, Germany and Italy, and ensure their contribution and readiness for the implementation of the European Open Science Cloud.







Challenges addressed





EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.





Key Exploitable Results



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License. 🔰 @EOSCPillar

in /company/eosc-pillar 🔗 www.eosc-pillar.eu

5



EOSC-Pillar's Results tackle all current **EOSC** Priority Areas **EUROPEAN OPEN** SCIENCE CLOUD **RULES OF** PRIORITY **SUSTAINABILITY** FAIR **ARCHITECTURE** LANDSCAPING AREAS PARTICIPATION **RESULTS OF EOSC-PILLAR CONTRIBUTE TO ALL THOSE PRIORITY AREAS** Policy and Legal Framework, **Initial Services Diverse Use Cases and** Services Sourced **National Initiatives Survey Promotion of FAIR Culture** and Business Models **Integrated into EOSC Community-Driven Pilots** from the Open Call



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.











7



The EOSC-Pillar survey

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



A mapping & analysis of the research infrastructure landscape in Europe

- * Goal: creating a comprehensive picture
 - * status quo of research data infrastructure
 - * on organisational, technical and legal aspects of data management
- * Method: a representative online survey
 - * definition of 4 target groups with relevance to EOSC
 - * focus on topics with relevance to EOSC
 - * national and European stakeholder involvement



Targets and topics



Targets

- * E-Infrastructures
- * Research Infrastructures
- * Universities
- * Funding Bodies

Topics

- * Business models, SLAs and user support
- * Access policies, AAI and licensing
- * Data management and FAIRness
- * User communities and services

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.





EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.

©EOSCPillar

FAIRness of survey data

- * Survey data set and additional documentation will be curated and available for reuse in the AUSSDA Repository
- * https://doi.org/10.11587/VOSVGK

MAUSS	D A AUSTRIAN SOCIAL SCIENCE DATA ARCHIVE	Add Data 👻	Search - About	User Guide Support Anita Bodlos
Public (AUS	SDA) We make social science data accessible	e, creating opportunities for re	search and data reuse, b	penefitting science and society.
SSDA > Public > EOSC Pill	ar "National Initiatives" Survey (SUF edition)			
				Contact C Share Share
	ational Initiatives" Survey (SUF e	dition)		
Version 1.0				
		.ars; Beckmann, Volker; Breton, Vincent; Romier, Geneviève; Van Wezel, Jos; Streit, Tanlongo, Federica; Van Nieuwerburgh, Inge, 2019, "EOSC Pillar "National Initiatives" 587/VOSVGK, AUSSDA, V1		Dataset Metrics 🕢
	loi.org/10.11587/VOSVGK, AUSSDA, V1			100 Downloads 🔞
				Too Downloads
E Cite Dataset -		Learn about	Data Citation Standards.	
	European Open Science Cloud (EO universities and funding bodies. The	PSC-Pillar "National Initiatives" at landscaping national initia SC). Four target groups are pa survey contains questions on	' Survey is a cross-section tives of open research da art of the study: e-infrastu the perception of EOSC	on study in Austria, Belgium, France, ata and services with relevance to the
Description 3	Germany, and Italy. The survey aims European Open Science Cloud (EO universities and funding bodies. The e.g. the e-infrastructures' business n	PSC-Pillar "National Initiatives" at landscaping national initia SC). Four target groups are pa survey contains questions on	' Survey is a cross-section tives of open research da art of the study: e-infrastu the perception of EOSC	on study in Austria, Belgium, France, ata and services with relevance to the ructures, research infrastructures, c as well as detailed questions assessing
Ecite Dataset - Description ?	Germany, and Italy. The survey aims European Open Science Cloud (EOS universities and funding bodies. The e.g. the e-infrastructures' business n policies related to open science. Social Sciences Access to information and communic	SC-Pillar "National Initiatives" at landscaping national initia SC). Four target groups are pa survey contains questions on nodels, technical characteristic pations technology, Communic	' Survey is a cross-section tives of open research dra art of the study: e-infrastu the perception of EOSC cs, access conditions, F/ cation networks, Data, D	on study in Austria, Belgium, France, ata and services with relevance to the ructures, research infrastructures, c as well as detailed questions assessing AIRness of the data holdings and adopted

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Coordination and Harmonisation of National & Thematic Initiatives to support EOSC

EOSC-Pil

The EOSC-Pillar survey results

A glimpse into the data



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a <u>Creative Commons Attribution 4.0 International License</u>





Business models

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



What funding bodies fund



Note: question was asked to funding bodies; multiple choice question; total percentages in all countries, N = 25.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Rules for funding



Note: question was asked to funding bodies; multiple choice question; total percentages in all countries, N = 25.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Sources of funding for e-infrastructures & services providers



Note: question was asked to respondents representing **e-infrastructures**; multiple choice question, mean across all countries.



💓 @EOSCPillar

Own revenues of the e-infrastructures & services providers

- * 37% acquire own revenues other than funding
- * of these, the sources of revenues are:



Note: question was asked to respondents representing **e-infrastructures**; multiple choice question, mean across all countries.







Service level agreements (SLAs) and user support



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Service level agreements (SLAs)

- * SLAs are offered for some or all services by about 1/3 of the e-infrastructures & services providers (and foreseen by 15%)
 - * mainly customized SLAs
- * About 20% of the e-infrastructures offer SLAs in the context of participation in a transnational organisation

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



User support & e-infrastructures

- * more than 90% describe their services via a website
- * feedback from users collected by 80%
- * user training offered by 77%
- * types of training:



Note: question was asked to respondents representing **e-infrastructures**; multiple choice question, mean across all countries.







Access policies, privacy and legal aspects



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Access regulations and federation of services

- * access to data/services mostly via some sort of access control
 - * ~34% have no data access restrictions
 - * on average 42% use group membership to restrict access
- * > 60% have an access policy in place
 - * ~50% of those without access policy plan to adopt one in the next years
- * We asked data/service providers whether they need support for federating their services with EOSC
 - * ~ 31% need support
 - * ~ 37% don't know





Legal aspects: personal data and licenses

- * most data/service providers do not offer data containing personal data (< 25%)
- * Licenses used by repositories



Note: question was asked to respondents representing **e-infrastructures** who indicated that their organisation 'offer(s) data infrastructures which store and manage research data'; multiple choice questions; mean across all countries; percentages do not add to 100% as missings are not shown.





Policies

- * Percentages for written regulations and publicly visible policies (e-infrastructures)
 - * Research data management (RDM): 30%
 - * Open research (data): 35%
 - * Compliance of data to the FAIR principles: 18%
- * The figures suggest that 70 to 80% have no written regulations or publicly accessible policies on these topics!





FAIRness of data



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



How familiar are you with the FAIR principles regarding data?



Note: mean across countries for e-infrastructures, research infrastructures and universities, total percentages for funding bodies (due to low

N), percentages do not add up to 100% as missings and residuals are not shown.

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



How FAIR do you consider your data holdings?



Note: question was asked to respondents representing **e-infrastructures** who indicated that their organisation 'offer(s) data infrastructures which store and manage research data' and who did not indicate to be 'not familiar at all' with the concept of FAIR data, mean across all countries; percentages do not add to 100% as missings are not shown.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Does your organisation provide a search feature for metadata?



Note: question was asked to respondents representing **e-infrastructures** who indicated that their organisation 'offer(s) data infrastructures which store and manage research data'; mean across all countries; percentages do not add to 100% as missings are not shown; Source of question (adapted): Core Trust Seal (2018): Core Trustworthy Data Repositories Extended Guidance. available at: https://www.coretrustseal.org/wp-content/uploads/2017/01/20180629-CTS-Extended-Guidance-v1.1.pdf, last accessed: 7 November 2019, p. 24.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Does your organisation provide a data catalogue in a machinereadable format?



Note: question was asked to respondents representing **e-infrastructures** who indicated that their organisation 'offer(s) data infrastructures which store and manage research data'; mean across all countries; percentages do not add to 100% as missings are not shown; Source of question (adapted): Core Trust Seal (2018): Core Trustworthy Data Repositories Extended Guidance. available at: https://www.coretrustseal.org/wp-content/uploads/2017/01/20180629-CTS-Extended-Guidance-v1.1.pdf, last accessed: 7 November 2019, p. 24.







Services and their users

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Services of e-infrastructures

Which service(s) does your organisation provide to the research community?

- * We offer data infrastructures which store and manage research data: 253 "yes"-responses
- * We offer high-bandwidth networks which transport research data: 31 "yes"-responses
- * We offer high-performance computing which can be used to process research data: 69 "yes"-responses

Source of categories (adapted): European Commission (2016): European Cloud Initiative - Building a competitive data and knowledge economy in Europe, available at: https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/1-2016-178-EN-2-1.PDF, last accessed: 6 November 2019, p. 2.





For which scientific discipline(s) does your organisation provide services?



Note: question was asked to respondents representing **e-infrastructures;** multiple choice question, mean across all countries; source of the categories (unchanged): Organisation for Economic Co-operation and Development (2007): Revised Field of Science and Technology Classification in the Frascati Manual; available at: https://www.oecd.org/science/inno/38235147.pdf; last accessed 6 November 2019.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



How frequently do the following groups use your services?



Note: question was asked to respondents representing **e-infrastructures**; mean across all countries; percentages do not add to 100% as missings and residuals are not shown.



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.





Country specific results



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



Country specifics – Austria

- * Responses
 - * high response rate among universities (of applied sciences)
 - * few research infrastructures identified, but high response rate
 - * relatively large number of e-infrastructures identified, average response rate

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.


Country specifics – Austria

- * E-infrastructures
 - * familiarity with EOSC comparatively low
 - * ~16% are part of an organisation which facilitates integration into EOSC
 - access restrictions: competition and funding bodies are less important than in other countries
 - * SLAs are less common than in other countries, high percentage of "n.a."



Country specifics – Belgium

- * High participation rate: 63%
- * esp. universities and research infrastructures participated
- * universities are familiar with EOSC and FAIR
- * RI less familiar with EOSC but (very) familiar with FAIR
- * El less familiar with EOSC
 - * services esp. for natural sciences and medicine
 - * funding esp. from government (state, region, some EU and funding bodies)





Country specifics – France

- * Global response rates within the average
- * Of the French e-infrastructures that responded to the survey...
 - * ~60% consider to be familiar with EOSC,
 - * ~70% think they will benefit from the EOSC,
 - * ~54% are part of an organisation that facilitates EOSC integration
- * Universities are much less familiar with EOSC (<25%)





Country specifics – France

- * More than 1/2 of e-infrastructures declare to get own revenues
- * User training is offered more frequently in the country's language and less frequently in English
- * France has the highest level of centrally organised user support





Country specifics – Germany

- * Response rate: DE breakdown
 - * Funding bodies (includes federal and state ministeries) = 22% (4 of 18)
 - * Research infrastructures (Leibniz, Helmholtz, MPG, Fraunhofer, a.o.) = 16.2% (77 of 476)
 - * Universities = 13.9% (54 of 390)
 - * E-infrastructures (e.g. data centers, data repositories) = 31.5% (94 of 298)
- * Reactions from respondents and challenges for the survey design
 - * Respondents are very interested to reply but asking for extension of deadline
 - Challenge to include institutions with a wide coverage (some of them are RI, universities and EI at the same time and cover different communities as well)
 - * questionnaire reached experts (to answer specific questions) after long delay



Country specifics - Germany

- Over 50% of the universities say the EOSC will affect their organisation, 75% expect to benefit from EOSC. Around 5% are already contributing to EOSC.
 - * At the same time, only 50% of the universities are familiar with FAIR, and less than 35% have regulations in place for research data management, open data and other aspects of FAIR (e.g. long term availability and related repositories.)
- * The research infrastructures are more familiar with FAIR and more (20%) are already contributing to EOSC.
- * A majority of the RI, E-I and universities indicated that they will contribute to EOSC.
- We asked universities: "What research discipline(s) from your organisation will benefit mostly from EOSC?"
 -> Expectations are low across disciplines.
- Interest in EOSC is substantial. Data on the expectations of EOSC is not yet available.





Country specifics – Italy

* Responses:

- more funding bodies identified than in any other country
- exceptionally high response rate for e-infrastructures (>50%)
- more e-infrastructures provide services for humanities, fewer for natural sciences and social sciences
- low response rate from universities, may indicate the need to increase engagement
- * Particularities about FAIRness:
 - Repositories: below average: perception of own FAIR readiness and dissemination in public domain or cc for open reuse
 - Repositories frequently perceive depositors to be "concerned" about the benefit and competitive disadvantage when sharing data (>35%), but only a minority is perceived as "very concerned" (<4%)
 - Regulations are in place but many are informal, may indicate a lack of directions from policy levels
 - exception: publication of data in repositories (many written regulations)



Country specifics – Italy

- * E-infrastructures:
 - * rather high familiarity with EOSC
 - * largest share of e-infrastructures already contributing to EOSC (58%)
 - * rather high expectations to be affected by EOSC and to benefit from it
 - * largest share indicating that contributing to EOSC will be "very beneficial" for the respondent's organisation (>50%)
 - * largest share for authentication "member of national federation", services proxied to eduGAIN







Outlook

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



in /company/eosc-pillar 🔗 www.eosc-pillar.eu 45

How will this information be used?

- * Provide a snapshot of the **state of the art of National Initiatives** for open research data and services
- * Gather information on: **readiness level**, **business models**, existing **policies** and **technologies**, **compliance** with EOSC
- * Help create a full picture at European scale and wider
- * Inform project's **strategy** & support and EOSC EB/GB





Next steps & what's in for you

- * One of the key project objectives is to support National Initiatives
- * Plan to work next on **policies & business models building** on the data collected
- * National Initiatives will get the report, results will be accessible under CC BY license
 - * use it for your NI strategy
 - * please provide feedback
 - * other surveying activities may be planned
- * get involved: interviews, workshop, forum to compare & discuss models





Q & A Time for questions

EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



🛅 /company/eosc-pillar 🔗 www.eosc-pillar.eu 48

Engage with us

Join the EOSC-Pillar Network to get our upcoming updates on

- ★ Results of the National Initiatives Survey
- Our prototype of a "National Services Registry"
- Our Business Model and Sustainability Study
- Launch of our Open Call for Services
- Publication of our FAIR training courses and toolkit
- Hackathons and webinars... and many more!

Signup Now			
First Name			
Last Name			
Email			
Organisation			
Country *			
- Select -	•		
Best way to describe you/your orga	inisation *		







Thank you!

Get in touch with us!





@<u>EoscPillar</u>

/company/eosc-pillar



EOSC-Pillar has received funding from the European Union's Horizon 2020 research and innovation Programme under Grant Agreement No. 857650. This material by the EOSC-Pillar is licensed under a Creative Commons Attribution 4.0 International License.



in



Suggested Citation

* Data set:

Bodlos, A., Hönegger, L., Kaczmirek, L., Beckmann, V., Breton, V., Romier, G., van Wezel, J., Streit, A., Stevanovic, U., Galeazzi, F., Tanlongo, F., van Nieuwerburgh, I. (forthcoming). EOSC-Pillar "National Initiatives" Survey. Vienna: AUSSDA. doi:10.11587/VOSVGK.

* Presentation:

Bodlos, A., Hönegger, L., Kaczmirek, L., Beckmann, V., Breton, V., Romier, G., van Wezel, J., Streit, A., Stevanovic, U., Galeazzi, F., Tanlongo, F., van Nieuwerburgh, I. (April 2020). EOSC-Pillar "National Initiatives" Survey: Results - A glimpse into the data (Webinar). Available at: https://www.eosc-pillar.eu/events/webinar-national-initiatives-survey-results.



